DIGITAL PROGRAMME
Terms of Reference

Development of Guidelines
to help Asset Intensive Organizations Exploit Digital Technologies

Context

Over 25 years, our context has evolved as Asset Management has become mainstream. The last decade has transformed the digital environment: for people, organizations and governments. This has had a huge impact on the challenges facing organizations 'doing' Asset Management; as well as emphasizing that Data, itself, is a valuable asset and enabler.

The IAM has been developing its thinking – and leading some debates in our community - in related areas (eg Maturity); and wishes to support Members and others, including suppliers, in understanding Data and maximising value from it.

Purpose

Our purpose is to develop IAM guidance that helps organizations exploit Digital Technologies within the Asset Management context; and actively promotes the roll-out of implementations. It is the nature of an ongoing, evolving programme that needs and projects will continue to emerge. This 'Purpose and 'Scope' are not considered comprehensive or final.

A key aspect is to address Data as an Asset; how to manage the cost-benefit balance of data, and the flow of data and information in and across organization boundaries; how to create identifiable value for the organization and/or its stakeholders and customers.

This Guidance will:-

- Include the value, selection and adoption of alternative digital approaches such as Digital Twins and other digital technologies;

- Help organizations understand levels of Digital adoption, necessary maturity, readiness and how to realise key benefits now and into the future;

- Address the skills, learning and capabilities that people need.

Alignment

This guidance is not intended to replace existing SSG[1]'s but will provide more strategic insight into the adoption of digital technologies. (Our SSGs will be reviewed for alignment.)

IAM is partnering CDBB's National Digital Twin initiative, as part of the Digital Twin Hub, to encourage organizations everywhere to adopt these concepts and guidance. Although this is a UK government initiative, the IAM will reach out to international organizations to understand their experiences and their needs.

The IAM will seek to collaborate with other bodies, wherever in the world they may be found, that wish to support this work.

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[1] Subject Specific Guidelines (SSG) published by the IAM.

Scope

The scope of the guidance will cover:

- The whole lifecycle of the Management of Assets, the corresponding information needs and technology, and the handover and governance of information across different stages of the lifecycle.
- All aspects of information management including: information requirements, information models, information standards including any industry standards, common data environments and digital twins. However, the technical design of architecture and data structures and frameworks are out of scope both because that would duplicate work done elsewhere and also this is not an IAM strength.
- Methods for determining the value from, as well as the value of, information and data and how to best exploit benefits from digital and digitisation.

Approach

In addition to the Steering Group, Working Groups will be established to undertake the activities proposed. We expect that there will be multiple workstreams of differing durations.

Governance

The Steering Group is authorized by IAM Board and will review regularly its best size and mix (and TofR), making recommendations to Board. It is essential that IAM Chapters are properly represented and the knowledge products and publications will be governed by IAM Faculty processes.

We shall involve the vendor community whilst retaining editorial control.

The following people were invited to form the initial Steering Group:

- Richard Edwards – Chair and IAM Lead (Past President & Board Member)
- Mildred Chau – Head of Enterprise Asset Management, MTA, USA
- Davin Crowley-Sweet – Chief Data Officer, Highways England, IAM Patron
- Brendan Kaplan, Enterprise Data Standards & Strategic Initiatives, MTA Transformation
- Tim Kersley – Head of Asset Management Strategy, Network Rail & Co-Chair, IAM Patrons
- David McKeown – IAM Board Member, Strategy & Development
- Guy Parker – Project Manager & SME, AMCL Director of Asset Information
- Neil Thompson - DT Hub / CDBB
- Nikki Walsh – Head of Asset Intelligence, NWG & co-Chair, IAM Patrons
- Dave White – Head of Asset Management, HS2

Sponsorship

The IAM will seek active support from leading vendors and integrators. Discussions are in hand to invite their valuable contributions to this work. We would be glad to hear of such interest if you have a relevant contact. Please contact David.McKeown@theIAM.org or Office@theIAM.org

Authorised by IAM Board on 10 December 2020

Workstreams and General Approach

Workstreams and Task Groups will be initiated to

- Enable Members and wider society to understand the relationship between: Optimized Asset Management decisions; Information Management; BIM (Buildings Information Modelling); and advanced digital approaches including Digital Twins, Artificial Intelligence and so on.
- Establish a clear and practical maturity scale to enable a step by step approach to the adoption of digital technologies
- Enable organizations to assess their current information management and digital capability against this maturity scale
- Develop methods for determining the value of information.
- Enable organizations to build a practical plan to increase the maturity of their digital capability with a clear understanding of the benefits and value proposition.
- Support CDBB in whatever other ways seem productive to both parties
- Comment on relevant government and other relevant publications

Discussion and 'self-help' groups will be established to:

- Engage organizations who are adopting digital technologies to share lessons learned to date
- Engage with technology vendors to gain support / sponsorship of the initiative
- Address the 'digital skills' challenge facing many organizations
- Develop guidance on the change management and implications of this journey